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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,753	03/03/2004	Gary Everett Grollimund	033018-138	2906

21839 7590 02/28/2006

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EXAMINER	
KERSHTEYN, IGOR	
ART UNIT	**PAPER NUMBER**
3745	

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/790,753	GROLLIMUND ET AL.	
	Examiner	Art Unit	
	Igor Kershteyn	3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 January 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *14-21,26 and 27* is/are allowed.

6)☒ Claim(s) *1-3,6,7,9 and 22* is/are rejected.

7)☒ Claim(s) *4,5,10-13 and 23-25* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Applicant's arguments filed 01/18/2006 have been fully considered but they are not persuasive. Claims 1-27 are now pending. Claims 1, 2, 4-15, 17, and 22-24 are amended. New claims 25-27 are added.

In the Arguments, Applicant generally states that claims 1, 22, and 23, as amended are not anticipated by the reference to Anderson (1,244,160) and the Examiner agrees to withdraw these rejections. However, there are no statements in the Arguments regarding prior art rejections over references to Anderson (1,326,889), Folke (2,369,345) and Folke (2,369,345) in view of Lee (5,601,421) and apparently there were no amendments made to the claims to overcome the above mentioned rejections because both references, Anderson 889 and Folke, teach the "groove extending ***parallel*** to the axial direction of said piston".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Anderson (1,326,889).

In figures 1-6, Anderson teaches a device useful for transferring quantities of a fluid from a reservoir to a downstream component, comprising: a cylinder housing 8 having an axially extending cylindrical recess (not numbered) therein; a piston 10 rotatably and reciprocally mounted within the cylindrical recess, the outer periphery of said piston 10 forming an interference fit with the inner periphery of said cylindrical recess, at least one groove 18 in the outer periphery of said piston 10, said groove 18 extending parallel to the axial direction of said first piston 10, and said cylindrical recess having an inlet port 13 adapted to provide fluid communication between an inlet and said at least one groove 18 when said piston 10 is in a first position, and an exit port 14 spaced from said inlet port 13 providing fluid communication between said at least one groove 18 and an outlet when said piston 10 is rotated to a second position, and said piston 10 moves to drive fluid out of said outlet.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Folke (2,369,345).

In figures 1, 4, 6, and 7, Folke teaches a device useful for transferring quantities of a fluid from a reservoir to a downstream component, comprising: a cylinder housing 10 having an axially extending cylindrical recess (not numbered) therein; a piston 11 rotatably and reciprocally mounted within the cylindrical recess, the outer periphery of said piston 11 forming an interference fit with the inner periphery of said cylindrical recess, at least one groove 15 in the outer periphery of said piston 11, said groove 15 extending parallel to the axial direction of said first piston 11, and said cylindrical recess

having an inlet port 16 adapted to provide fluid communication between an inlet and said at least one groove 15 when said piston 11 is in a first position, and an exit port 17 spaced from said inlet port 16 providing fluid communication between said at least one groove 15 and an outlet when said piston 11 is rotated to a second position, and said piston 11 moves to drive fluid out of said outlet.

Claims 1 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanny et al. (5,312,233).

In figures 1-8, Tanny et al. teach a device useful for transferring quantities of a fluid from a reservoir to a downstream component, comprising: a cylinder housing 11 having an axially extending cylindrical recess 50 therein; a piston 15 rotatably and reciprocally mounted within the cylindrical recess 50, the outer periphery of said piston 15 forming an interference fit with the inner periphery of said cylindrical recess 50, at least one groove 70 in the outer periphery of said piston 15, said groove 70 extending parallel to the axial direction of said first piston 15, and said cylindrical recess 50 having an inlet port 53 adapted to provide fluid communication between an inlet and said at least one groove 70 when said piston 15 is in a first position, and an exit port 54 spaced from said inlet port 53 providing fluid communication between said at least one groove 70 and an outlet when said piston 15 is rotated to a second position, and said piston 15 moves to drive fluid out of said outlet.

Claims 1, 6, 7, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Kinne (3,447,468).

In figures 9-10, Kinne teaches a device useful for transferring quantities of a fluid from a reservoir to a downstream component, comprising: a cylinder housing 104 having an axially extending cylindrical recess 116,128 therein; a piston 148 rotatably and reciprocally mounted within the cylindrical recess 116,128, the outer periphery of said piston 148 forming an interference fit with the inner periphery of said cylindrical recess, at least one groove 200 in the outer periphery of said piston 148, said groove 200 extending parallel to the axial direction of said first piston 148, and said cylinder having an inlet port 132 adapted to provide fluid communication between an inlet and said at least one groove 200 when said piston 148 is in a first position, and an exit port 136 spaced from said inlet port 132 providing fluid communication between said at least one groove 200 and an outlet when said piston 148 is rotated to a second position, and said piston 148 moves to drive fluid out of said outlet.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Folke (2,369,345).

Folke discloses all the claimed subject matter.

Folke does not disclose expressly at least one groove is a rectangular groove approximately 0.005 inch deep and approximately 0.010 inch wide.

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to modify a pump of Folke with a rectangular groove approximately 0.005 inch deep and approximately 0.010 inch wide because Applicant has not disclosed that having a rectangular groove approximately 0.005 inch deep and approximately 0.010 inch wide provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the groove of Folke for transferring the fluid from inlet to outlet ports.

Therefore, it would have been an obvious matter of design choice to modify Folke to obtain the invention as specified in claim 3.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Folke (2,369,345) in view of Lee (5,601,421).

Folke teaches all the claimed subject matter except that he doesn't teach the cylinder housing comprises an injection molded body of a polymeric material.

Lee, in figure 1, teaches a fluid piston pump having a cylinder housing coprising an injection molded body 62 of a polymeric material.

Since Folke and Lee are analogous art because they are from the same field of endeavor, that is the piston pump art, it would have been obvious at the time the

invention was made to a person having ordinary skill in the art to make the cylinder of Folke with the polymeric material as taught by Lee for the purpose of reducing pump weight.

Allowable Subject Matter

Claims 14-21, 26, and 27 are allowed.

Claims 4, 5, 8, 10-13, and 23- 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Kershteyn whose telephone number is **(571)272-4817**. The examiner can be reached on Monday-Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look, can be reached on **(571)272-4820**. The fax number is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308 0861.

IK
February 24, 2006

Igor Kershteyn
Patent examiner.
Art Unit 3745